# Region 8 UIC Program Snapshot June 2014

### Regional Well Inventory

| Region | State | Population | Area    | Class | Class   |       | 8     | Class | £     |              |
|--------|-------|------------|---------|-------|---------|-------|-------|-------|-------|--------------|
|        |       |            |         | I HW  | I Other | II    | III   | Ш     | IV    | $\mathbf{V}$ |
|        |       | (,000)     | (sq.mi) | Wells | Wells   | Wells | Sites | Wells | Sites | Wells        |
| 8      | CO    | 4301       | 102868  | 0     | 19      | 901   | 5     | 33    | 0     | 2121         |
| 8      | MT    | 902        | 138904  | 0     | 0       | 1178  | 0     | 0     | 0     | 6405         |
| 8      | ND    | 642        | 69372   | 0     | 4       | 1290  | 0     | 0     | 0     | 668          |
| 8      | SD    | 755        | 69179   | 0     | 0       | 87    | 14    | 14    | 0     | 377          |
| 8      | UT    | 2233       | 81279   | 0     | 0       | 547   | 3     | 52    | 2     | 920          |
| 8      | WY    | 494        | 94867   | 0     | 59      | 5029  | 9     | 10552 | 0     | 2410         |
| Total  |       | 9327       | 556469  | 0     | 63      | 9032  | 31    | 10651 | 2     | 12901        |

## **UIC Program Managers**

- o Sadie Hoskie, Water Program Director
- o Mark Chalfant, Acting Technical UIC Enforcement Director
- o Douglas Minter, Acting UIC Unit Chief
- 7 Staff FTE and 5 SEEs in the permitting group (OPRA). 1.5 Staff FTE and 2 SEEs in enforcement group. (note: two additional FTE on detail to ORD)

#### **Program Responsibilities - Primacy and DI**

- Colorado, Montana, South Dakota, and the Fort Peck Tribes have 1425 delegation
- North Dakota, Wyoming and Utah have 1422 and 1425 delegation (full primacy).
- EPA has DI responsibility for Colorado, Montana and South Dakota (except Class II), and in Indian country (43 Tribes)

#### **Regional DI Permitting Activities**

- Class I: Class I area permitting for disposal of uranium ISR-related wastes associated with the Centennial, CO site is on hold at the request of the permit applicant. We have issued additional Class I nonhazardous permits for wastewater disposal associated with CO<sub>2</sub> production in southwestern Colorado.
- Class II: Up to 90% of new permitting workload continues to be within the Uintah & Ouray Reservation in Utah's Uinta Basin. These permits are primarily for enhanced oil recovery and disposal of produced water from gas development. Basin disposal capacity continues to be adequate which helps prevent installation of surface evaporation pits. Two companies (Newfield Production and Berry Petroleum) are anticipating substantial increases in EOR development through the addition of hundreds of injection wells in the Basin within the next few years. We issued a field-wide area permit for Newfield in order to streamline how newly converted wells will be incorporated into the permit and are in the process of permitting Berry in the same

fashion. We are also seeing an emerging demand for disposal permits within ND Indian country to handle increasing volumes of produced fluid from the Bakken shale oil play.

- Class III: We continue to coordinate with the DENR in reviewing Powertech's UIC permit application for uranium recovery for Dewey Burdock ISR site in SD. Draft permit issuance will follow NRC's licensing and NEPA processes which were recently concluded. We have offered Section 106 National Historic Preservation Act consultation to a number of tribal governments. As noted above, the Centennial, CO uranium ISR project near Fort Collins has been put on hold. There continues to be considerable public/Congressional interest in both projects.
- Class V: We are drafting a deep Class V area permit for Dewey Burdock uranium ISR wastewater disposal in SD. In conjunction with the PWS program, we are conducting a midcourse evaluation of our rule-authorized ASR projects in CO to determine if any of these projects need to be called in for permits. We continue to conduct shallow Class V inventory inspections to identify endangering wells.
- Class VI: We expect to receive our first Class VI permit application later this year for a DOE-funded pilot CO2 geo-sequestration project at Kevin Dome in MT.
- Data Analysis and Database Management: We are re-designing our UIC permit writing software, and Regional UIC database enhancements for all well classes, to improve Regional tracking and reporting into EPA's national system. We are exploring completion of this effort through a work sharing arrangement with Region 10's UIC program to mutually realize better economies of scale. We recently completed accounting of over a thousand aquifer exemptions in our DI and State programs over the last 30 years, and provided the data to OGWDW.
- State/Tribal UIC Program Oversight and Regulatory Assistance: We continue to receive up to 35 aquifer exemption requests per year, predominantly associated with Class II disposal and enhanced recovery permits in WY, MT, and CO. We are reviewing an increasing number of Class I permit applications for new and existing uranium ISR wastewater disposal in WY, some of which would necessitate exemption of very deep USDWs. We continue to provide technical assistance to our ten State and Tribal UIC programs working toward some degree of electronic reporting. We have completed our review of State Class VI primacy documents (e.g., rules) for ND. We expect approval of their Class VI program by this summer/ early fall. The State expects to receive its first Class VI permit application soon after obtaining primacy. We also expect to receive an initial pre-application draft of Class VI primacy documents from the WYDEQ later this year.

#### Other Regional Initiatives and Successes

- Bakken Due to the unprecedented development of the Bakken Formation, the Region has put together a multi-media team to coordinate information, pass along programmatic knowledge and perform multi-media inspections to maximize limited travel dollars.
- Class II Area Permits Significant efficiencies continue to be realized from implementation of the Newfield Area Permit which regulates over 700 Class II wells for enhanced oil recovery in Utah's Uinta Basin. Production wells are now converted to injection at a rate of 120 wells per year. Record keeping has become more efficient, paperwork has been reduced and labor hours are more productively spent. We have initiated electronic approvals, reducing time and mailing costs significantly and increasing the speed at which the operator can commence injection.

#### **Regional Challenges**

- National (OECA) and Regional budget cuts continue to strain limited travel budget/staffing. The Region must continue to target efforts to high priority well closures and limit participation on various national efforts, the national database, UIC work groups & policy issues, while continuing to pursue strategies to increase rates of well closures/compliance.
- The UIC permitting group has lost four FTEs in the past two years with another anticipated retirement in August. Resource impacts have been partially mitigated by the efficiencies gained through our new Class II area permitting process which now covers over half of our existing DI Class II well universe.

### **Compliance and Enforcement:**

- # of inspections/year
  - o Class 1 1 inspections/year
  - O Class II 400 inspections/year
  - o Class III 5 inspections/year
  - O Class V 150 inspections/year
- # of enforcement actions/year
  - o 8 UIC Class V Administrative Penalty Orders/year targeting MVWDW closures
  - 3 UIC Class I/II/III Administrative Penalty Orders (yearly average, but no currently pending)
- Sector/Well class focus & enforcement approach, judicial, administrative, etc:
  - R8 is pursuing Administrative Penalty Orders for Class V MVWDWs and Large Capacity Cesspools wherever we identify these high priority wells. We are initiating a large capacity cesspool identification and closure effort focusing first on federal land management units.
  - o In Class I, II, and III, we are trying to inspect each well every 2 or 3 years, and we are reviewing compliance with a group of more complex permit requirements in one aquifer in Utah.
- Participation in the OECA Energy Extraction initiative --
  - Region 8 is targeting inspections at Class I and II UIC facilities in the onshore gas sector as part of the EEI.